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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,912	03/24/2004	Atsunari Tsuda	9319S-000693	3961
27572	7590	03/14/2008		
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BLOOMFIELD HILLS, MI 48303				
EXAMINER				
CHOW, YUK				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
03/14/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/807,912

Applicant(s)

TSUDA ET AL.

Examiner

YUK C. CHOW

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-10, 12, 13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 12, 13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-083)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-10, 12-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura (US Patent 7,098,902) in view of Maeda et al (US Patent 6,072,465).

As to claims 1, 8, 9 and 15, Tamura discloses a display drive device (Fig. 1) comprising:

a drive circuit (Fig. 1 (110)) driving a display unit (Fig. 1(100)) in which pixels are formed;

a nonvolatile storage circuit (Fig. 1(134)) storing screen information indicating a position of a pixel to be driven in the display unit (Col. 3 line 59-Col. 4 line 4);

a control circuit (Fig. 1(130)) reading the screen information from the nonvolatile storage circuit (Col. 4 lines 25-32); and

a drive setup circuit (Fig. 1) setting a position based on the screen information read by the control circuit in the drive circuit (Col 5 Lines 39- 54), the drive setup circuit including an address control circuit (Fig. 2(540)) that controls a driving column of pixels and a reading address Fig. 2(542) for display data (see Col. 4 lines 48-58).

However, Tamura does not specifically teach a determination circuit that determines whether a drive voltage is supplied from a voltage supply circuit that supplies a drive voltage to the drive circuit based on the screen information read by the control circuit, and, if the determination is negative, re-starts the voltage supply circuit.

Maeda discloses a portable information processing apparatus, wherein teaches a power management circuit (Fig. 3(50)) and a local resume process (Fig. 9(S61)), which restarts power supply upon receipt of the resume interrupt (see Col. 18 line 52 - Col. 19 line 6).

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate a display drive control device capable of restart a power supply as in Maeda into display device of Tamura, due the deterioration of hardware can be prevented (see Maeda's abstract).

As to claim 2, Tamura discloses a display drive device according to claim 1, wherein the control circuit reads the screen information from the nonvolatile storage circuit in synchronization with a supply of a power voltage from a power circuit which supplies a voltage (see Col. 4 lines 20 – 41).

As to claim 3, Tamura discloses a display drive device according to claim 1, wherein the control circuit reads the screen information from the nonvolatile storage circuit at predetermined intervals (see Col. 7 lines 26-31).

As to claim 4, Tamura discloses a display drive device according to claim 1, wherein the nonvolatile storage circuit stores the display information (see Col. 4 lines 17-38); the control circuit reads the display information from the nonvolatile storage

circuit (see Col. 4 lines 17-38); and the drive circuit displays the display information read from the control circuit on the display unit (see Col. 4 lines 17-38).

As to claim 5, Tamura discloses an electro-optical device (Fig. 1, see Col.2 lines 17-21, Col 3 lines59-65) comprising the display drive device according to claim 1.

As to claim 6, Tamura discloses an electronic apparatus (Col. 4 Lines 37-41, also see Fig. 1) comprising the electro-optical device according to claim 5.

As to claim 10, Tamura discloses a display drive device according to claim 9, wherein the control circuit receives instruction information for instructing the reading of the setup information and reads the corresponding setup information (Col. 4 lines 25-32).

As to claim 12, Tamura discloses an electro-optical device (see title) comprising the display drive device (Fig. 1) according to claim 9.

As to claim 13, Tamura discloses an electro-optical device (see title) comprising an electronic apparatus (Col. 4 Lines 37-41) according to claim 12.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 8, 9 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK C. CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./
Examiner, Art Unit 2629

/Amare Mengistu/
Supervisory Patent Examiner, Art Unit 2629